

C L A I M S

1. Method for automatically transforming a provider offering describing a customer specific service environment in a high-level description into a form which is automatically executable by a resource management system, the method comprises the steps of:

receiving a description of a provider offering,
extracting from a resource catalog information which resource types need to be part of said provider offering,
extracting from a resource management action catalog information about resource management actions of said resource types identified by said extracting step,
compiling said information from said resource catalog and said resource management action catalog into a machine readable form executable by said resource management system.

2. Method according to claim 1, wherein said first extracting step comprising the step of:
mapping said high-level description of said provider offering to respective resource types including reference information to execute resource management actions for said resources types as well as information about dependencies of said resource types belonging to said customer specific service environment.

3. Method according to claim 2, wherein the result of said mapping step is a customer specific service environment resource topology tree comprising all needed resource types (base resources) with their references to their assigned aggregated resource types.

4. Method according to claim 3, wherein said customer specific service environment topology tree is generated by the steps of:

using said provider offering as root node of said customer specific service environment topology tree,

adding identified resource types as nodes in said topology tree which are mapping with said provider offering ,

adding child nodes to said identified nodes when said identified resource types (aggregated resource types) map into a set of lower level resource types (child resources),

repeating the previous steps until said resource types cannot be mapped into set of lower resource types (base resource types).

5. Method according to claim 1, wherein said resource management actions includes the operations creation, management and/or deletion of said resource types.

6. Method according to claim 5, wherein said resource management actions are sequenced according to requirements of said defined service environment.

7. Method according to claim 6, wherein said sequence is defined by input and out parameter of said resource management actions.

8. Method according to claim 6, wherein said sequence is implemented as workflow executable by said resource management system.

9. Method according to claim 1, wherein said resource management actions are used to define a decision logic in form of rules to control the execution of said resource management actions.

10. Method according to claim 8, wherein said defined work flow process or said decision logic is implemented in a form of XML data.

11. Method according to 2, wherein said reference information includes a URL pointing to a Web Service with the corresponding Web Service description for execution of said resource management actions.

12. System for transforming a provider offering describing a customer specific service environment in a high-level description into a form executable by a resource management system, comprising:

a provider offering (110) describing a customer specific service environment in business terms,

a resource catalog (112) containing individual descriptions of resources types belonging to the Service Provider infrastructure including reference information to execute resource management actions for said resource types as well as information about dependencies of said resources types,

a transformation component (115) having input from said provider offering (110) and said resource catalog (112) for creating a customer specific service environment resource topology (120) describing all resource types needed to be part

of said customer specific service environment including their reference information to execute resource management actions for said resource types as well as information about dependencies of said resources types,

a resource management actions catalog (122) which contains information about resource management actions for the operation of said resource types belonging to said Service Provider's infrastructure,

a compilation component (125) having input from said transformation component (115) and from said resource management actions catalog (122) for compiling said input in a machine-readable form executable by a resource management system (132).

13. System according to claim 12, wherein said resource catalog (112) contains categorized aggregated resource types which contain references to one or more other resources types with other parameters for them or a certain combination of them or both.

14. System according to claim 13, wherein said provider offering (110) forms the highest aggregation level of aggregated resource types and the base resources form the lowest not further expandable level in said resource catalog, wherein only said base resource types contain reference information to execute resource management actions for said resource types.

15. System according to claim 12, wherein the result of said transformation component (115) is a customer specific service environment resource topology tree (120) for said customer

specific service environment comprising all needed resource types (base resources) with their references to their assigned aggregated resource types.

16. System according to claim 12, wherein said resource catalog (112) may be implemented in a form of a table stored in a database, or XML file stored in a file system.

17. System according to claim 12, wherein said resource management actions includes creation, management, and deletion of said resource types.

18. System according to claim 17, wherein each resource management action is defined by the name of the resource type, its task and its specific input and output parameter.

19. System according to claim 12, wherein the result of said compilation component (125) is a machine-readable description of sequenced resource management actions as well as decision logic for operating said customer specific service environment.

20. Computer program product stored in the internal memory of a digital computer, containing parts of software code to execute the method in accordance with claim 1-11 if the product is run on the computer.